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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/072,931 02/12/2002 Shunpei Yamazaki 740756-2433 3751 **EXAMINER** 31780 11/18/2004 7590 **ERIC ROBINSON** ISAAC, STANETTA D PMB 955 ART UNIT PAPER NUMBER 21010 SOUTHBANK ST. POTOMAC FALLS, VA 20165 2812

DATE MAILED: 11/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/072,931	YAMAZAKI ET AL.
	Examiner	Art Unit
	Stanetta D. Isaac	2812
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
1) Responsive to communication(s) filed on <u>25 August 2004</u> .		
2a) This action is <b>FINAL</b> . 2b) This action is non-final.		
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is		
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		· ·
4)⊠ Claim(s) <u>1-80</u> is/are pending in the application.		
4a) Of the above claim(s) 1-46,50,52,54,56-58,60-62 and 64-77 is/are withdrawn from consideration.		
5)⊠ Claim(s) <u>47,51,53,55,59 and 63</u> is/are allowed.		
6)⊠ Claim(s) <u>78 and 79</u> is/are rejected.		
7)⊠ Claim(s) <u>80</u> is/are objected to.		
8) Claim(s) are subject to restriction and/or election requirement.		
Application Papers		
9) The specification is objected to by the Examine	r.	
10)⊠ The drawing(s) filed on <u>12 February 2002</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).		
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
12) △ Acknowledgment is made of a claim for foreign a) △ All b) ☐ Some * c) ☐ None of:  1. △ Certified copies of the priority documents 2. ☐ Certified copies of the priority documents	s have been received. s have been received in Application	on No
3. Copies of the certified copies of the priority documents have been received in this National Stage		
application from the International Bureau (PCT Rule 17.2(a)).		
* See the attached detailed Office action for a list of the certified copies not received.		
LÝNNE A GURLEY		
Attachment(s)		PATENT EXAMINER
1) Notice of References Cited (PTO-892)	4) L Interview Summary	
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal P	ite atent Application (PTO-152)
Paper No(s)/Mail Date	6) Other:	

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#### **DETAILED ACTION**

This Office Action is in response to the amendment filed on 8/25/04. Currently, claims 1-80 are pending. Claims, 47, 51, 53, 55, 59, 63, and newly added claims 78-80 are elected.

#### **EXAMINER'S REMARKS**

The Examiner would like to clarify for the record that elected claims 47, 51, 53 55, 59, and 63, are drawn to figures 2A-2G, in addition newly added claim 78 is the generic claim.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 78 and 79 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki et al. US Patent 6,048,758.

The applied reference has a common inventor and assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Yamazaki discloses the semiconductor method as claimed. See figures 1A-11, with emphasis on-figures-1A-1D, and corresponding text, where Yamazaki teaches a method of manufacturing a semiconductor device comprising the steps of: providing a crystalline semiconductor film comprising silicon over a substrate, said crystalline semiconductor film containing metallic element (figures 1A-1B; col. 6, lines 50-65); forming a semiconductor film over the crystalline semiconductor film (figure 1C; col. 6, lines 66-67; col. 7, lines 1-3); adding an inert element into the semiconductor (figure 1C; col. 6, lines 66-67; col. 7, lines 1-3); gettering the metallic element into the semiconductor film to remove or reduce the amount of metallic element within the crystalline semiconductor film (figures 1C-1D; col. 7, lines 1-20).

Pertaining to claim 79, Yamazaki teaches a method of manufacturing a semiconductor device, wherein the inert element is added into an upper surface of the semiconductor film (col. 3, lines 38-67).

### Response to Arguments

Applicant's arguments with respect to claims 47, 51, 53, 55, 59, and 63 have been considered but are moot in view of the new ground(s) of rejection.

# Allowable Subject Matter

Claim 80 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Claims 47, 51, 53, 55, 59, 63 are allowed over the prior art of record. The closest prior art of record, Yamazaki et al., US Patent 6,048,758 and Matsuki et al., US Patent 5,960,252, fails to show, adding an inert gas element, such as helium (He), neon (Ne), argon (Ar), or xenon (Xe) to an upper surface of the second semiconductor film.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stanetta D. Isaac whose telephone number is 571-272-1671. The examiner can normally be reached on Monday-Friday 9:30am -6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Niebling can be reached on 571-272-1679. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stanetta Isaac Patent Examiner November 8, 2004 LYNNE A. GURLEY

RIMARY PATENT EXAMINER